LASER SHOW SYSTEM

Uranus

User's Manual

This chart lists the DMX dipswitch setting for DMX address 1 through 511. Follow the instructions below to configure fixture dipswitches with you desired DMX address.

DMX Address Quick Reference Chart

DipSwitch Position

DMX:DIPSWITCH SET						#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
0=OFF						#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1=ON						#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
X=OFF or ON						#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																		
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480	
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482	
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483	
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484	
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485	
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488	
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489	
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490	
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491	
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492	
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493	
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494	
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495	
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496	
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497	
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498	
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499	
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500	
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501	
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502	
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503	
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504	
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505	
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506	
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507	
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508	
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509	
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510	
1	1	1	1	1		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

DipSwitch Position **DMX Address**

Notes:

1. DMX console can not be used in Master-Slave operation (Sound Active or AUTO mode).
2. There should be only one master unit in Master-Slave operation.

Troubleshooting

1. If the power supply indicator doesn't light up and the laser doesn't work, please check the power supply and the input voltage.
2. In Stand-Alone operation, if the power supply indicator is light up and sound active indicator isn't light up, but the laser is shut off doesn't work.

A. Because sound is too small make for laser shut off in sound active, please increase the music volume or increase audio sensitivity with sensitivity knob, please check as below.

B. Please check if unit has been set up in slave mode, then set up in master mode.

3. In Master-Slave operation, slave unit don't function, please check as below.

A. Make sure to there's only one master in the chain, and the others are set in slave mode.

B. Make sure to control the unit without DMX console controlling.

C. Make sure to take a good quality power cable and connection.

4. In DMX mode operation, the laser is OFF and the DMX signal indicator is unlighted, please check as below.

A. Make sure to set up the DMX mode.

B. Make sure to have a good connection.

5. In DMX operation, the unit can't be controlled by the DMX console, but the DMX signal indicator is flashing, please make sure the DMX console and unit have the same channel.
6. If the output beam direction above isn't the right way, please restart the unit.
7. If the unit is fail, please turn off the unit, then turn on again after 5 minutes.

After trying the above solution you still have a problem, please contact your dealer or our company for service.

General instructions

Unpacking:

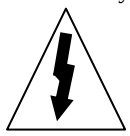
Thank you for purchasing this product. Please read user guide for safety and operations information before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check the attachments listed on the page after opening the carton. In the event of carton damage or attachment missing in transit, please contact your dealer or our after sales service department.

Attachments:

1. Laser Light: 1PCS
2. Power Cable: 1PCS
3. User Guide: 1PCS

Notice:

1. Do not exposure the human eye direct to laser beam.
2. Do not turn on and off the unit frequently.
3. Before using this unit make sure the power supply is ground.
4. This unit is intended for indoor use only and should be prevented form water, moisture and shake. The working temperature of this unit is 18～30℃, do not use this continuously over 4 hours, otherwise it shortens the lifetime of the unit.
5. Use cleaning tissue to remove the dust absorbed on the external lenses periodically to optimize light output.
6. Do not remove or break the warranty label, otherwise it void the warranty.
7. Always replace with the exact same type fuse, replacement with anything other than the specified fuse can cause fire or electric shock and damage your unit, and will void your manufactures warranty.



DANGER

LASER RADIATION AVOID EXPOSURE

TO BEAM CLASS 3B LASER PRODUCT

Technical Specification

1. Voltage: AC110V or AC220V-240V/ 50HZ-60HZ/ Fuse: 2A/250V
2. Rated Power: 50W
3. Laser: 100mW@532nm, green DPSS laser
4. Working Modes: DMX, Sound Active, AUTO, Master-Slave
5. DMX Control Channel: 7 channels
6. Graphics & Effects: more than 100 patterns, over 400 effects
7. Interface: 3 pins XLR jack for DMX or Maser-Slave linking
8. Size: L*W*H=295*335*160mm
9. Weight: 4.5Kg

Features

1. Various working modes

Includes four working modes as DMX, Sound Active, AUTO and Master-Slave Control for different applications.

2. Various programs

The laser beam is blanking effect, so the pattern is more perfection. More than 50 laser patterns, over 400 laser effects. Different working modes has dif-ferent program.

3. DMX control

The unit has seven channels to control in DMX mode. The unit has BLACK OUT function.The uint will shut OFF if no DMX512 signal.

4. Master-Slave function

The system allow link many units (as slave unit) together to doing synchro job without console in sound active or AUTO mode.

5. LED indicating and shut-off function

In sound active mode, the unit's panel has LED indicating for sound active. The unit will shut off after 8 seconds when the music stops.

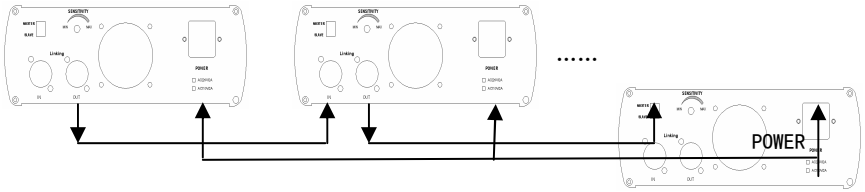
6. DPSS Laser

Use Diode-Pumped Solid State green laser, stable output and long working life.

Master-Slave Operation

This mode will allow you to link up to 32 units together without controller.

1. Install the units in a suitable position (laying or appending).
2. Choose a unit to function as Master mode, set dipswitch to select Sound Active or AUTO mode. The others must be set to Slave mode, set dipswitch to select Slave mode.
3. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
4. Turn on the all units' power, the units begins reset, then the unit begins working. The slave units will react the same as the master unit.
5. The units will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the master unit to make the unit more or less sensitive in sound active.The panel has LED indicating for sound active.

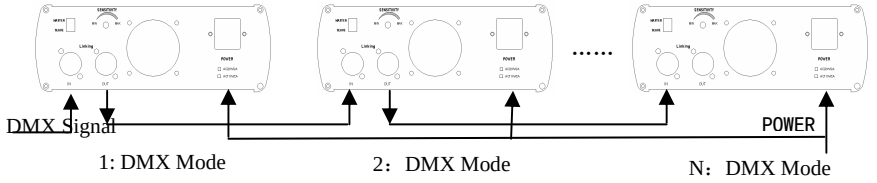


1: Master: Sound/AUTO　　2：Slave　　N：Slave

Universal DMX Operation (DMX mode)

This mode allows you to use universal DMX-512 console to operate.

1. Install the units in a suitable position (laying or appending).
2. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
3. Assign a DMX address to each the unit using dipswitches, see the "DMX Address Quick Reference Char".
4. Turn on the all units' power, the units begins reset, then the unit begins working.
5. Use DMX console to control your units.



1: DMX Mode　　2：DMX Mode　　N：DMX Mode

DMX address calculation

For DMX mode, DMX address from #1 to 9# dipswitches must be set, the address is set from 1 to 511. Each dipswitch represents a binary value.

Dipswitch	Value	Dipswitch	Value
#1	1	#6	32
#2	2	#7	64
#3	4	#8	128
#4	8	#9	256
#5	16	#10	DMX, Set to "0"

One unit has 7 channels, so each unit must be assigns 7 channels at least. We may assign 8 channels for one unit, then DMX address = 8*N + 1, N=0, 1, 2, 3 ……

Example

One loop address=1, two loop address=9, three loop address=17, four loop address=25

Loop	Address	Binary	Dipswitches
1	1	100000000	#1
2	9	100100000	#1+#4
3	17	100010000	#1+#5
4	25	100110000	#1+#4+#5

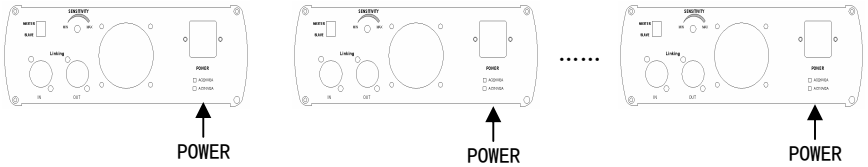
The dipswitches setting for DMX address see the " DMX Address Quick Reference Chart ".

Operation

Stand-Alone Operation (Sound Active, AUTO mode)

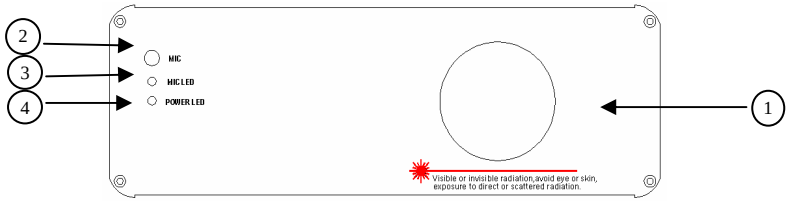
The mode allows a single unit to react to the beat of the music in the master mode.

1. Install the units in a suitable position (laying or appending).
2. Set dipswitch to select Sound Active or AUTO mode.
3. Turn on the unit power, the unit begins reset, then the unit begins working.
4. The unit will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the unit to make the unit more or less sensitive in sound active.The panel has LED indicating for sound active.



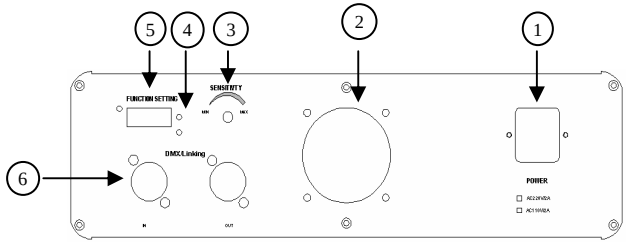
1: Master: Sound/AUTO 2: Master: Sound/AUTO N: Master: Sound/AUTO

Front/Rear Panel



Front Panel Figure

1. Laser Aperture
2. Sound Active Microphone
3. Sound Active Indicator:Blue
4. Power Indicator:Red



Rear Panel Figure

1. Power Jack
2. Cooling Fan
3. Audio Sensitivity Knob
4. DMX Signal Indicator: Green
5. Dipswitches: Function Setting
6. DMX or Linking Jack

Function & Setting

Sound Active

The change of the laser pattern is controlled by sound, that is, the rhythm of the sound control the effect of the changing laser pattern. Turning the sensitivity knob in the clockwise direction to increase the fixture's sensitivity to sound, the knob in the counter clockwise direction to decrease. The laser diode will automatically turn off after 8 seconds when the music stops.

AUTO

Auto cycles the built-in programs without being controlled externally. It has no laser OFF.

DMX Control

The system only accepts the DMX512 signal of international standard to control the system mode, the laser pattern ON /OFF, the size, the position, the speed, etc.

DMX Control Parameter Chart

Channel	Function	Value	Description
CH1	Mode	0～49	Close, laser OFF
		50～99	Static patterns of DMX mode ①
		100～149	Dynamic patterns of DMX mode
		150～199	Sound active mode
		200～255	Auto mode
CH2	Pattern selection	0～255	52 static/dynamic pattrens
CH3	Position-X	0～255	Adjust position-X
CH4	Position-Y	0～255	Adjust position-Y
CH5	Scanning speed	0～255	0 is speedy, 255 is slow
CH6	Dynamic pattens play speed	0～255	0 is speedy, 255 is slow, has ten grade speed
CH7	Static pattern size	0～255	0 is small, 255 is big

CH2 Parameter Chart For Function

DMX value	Static patterns	Dynamic patterns	DMX value	Static patterns	Dynamic patterns
0～4	one circle	circle to big	130～134	triangle 2	two hori dot line mov
5～9	empty circle	empty circle to big	135～139	dot triangle 2	vertical line move
10～14	dot circle	dot circle to big	140～144	chiasma line	vert-dot line move
15～19	scan circle	scan circle to big	145～149	chia-dot line	two vertical line mov
20～24	two circle	circle roll	150～154	square	two vert-dot line mov
25～29	three circle	empty circle roll	155～159	dot square	square extend
30～34	four circle	dot circle roll	160～164	rectangle	dot square extend
35～39	two emp-circle	circle turn	165～169	dot rectangle	pentagon extend
40～44	two dot circle	dot circle to add	170～174	many hori-line	square turn
45～49	hor-extend line	circle jump	175～179	many vert-line	pentagon turn
50～54	hori-shrink line	scan circle extend	180～184	tetragon 1	line scan
55～59	hori-flex line	circle flash	185～189	tetragon 2	dot line scan
60～64	horizontal line	empty circle roll	190～194	pentagon 1	wave turn

DMX value	Static patterns	Dynamic patterns	DMX value	Static patterns	Dynamic patterns
65～69	hori-dot line	two circle turn	195～199	pentagon 2	dot wave turn
70～74	vertical line	four circle turn	200～204	pentagon 3	wave flowing
75～79	hori-dot line	diagonal jump	205～209	wave line 1	dot wave flowing
80～84	45° diagonal	sector to big	210～214	wave line 2	sine wave
85～89	dot diagonal	dot sector to big	215～219	wave line 3	dot sine wave
90～94	two hori-line	diagonal move	220～224	wave dot line	tetragon turn
95～99	two hori-dot lin	dot diagonal move	225～229	spirality line	pentagon star 1 turn
100～104	two vert-line	long sector round	230～234	welcome	pentagon star 2 turn
105～109	two vert-dot lin	short sector round	235～239	horizontal dot	square dot jump
110～114	V line	three line round	240～244	vertical dot	bird fly
115～119	V dot line	hori line move	245～249	many dot 1	many dot jump 1
120～124	triangle 1	hori dot line move	250～254	square dot	V pattern move
125～129	dot triangle 1	two hori line move	255	many dot 2	many dot jump 2

There are 52 static patterns, the sizes of the patterns that DMX value is 140 previous are adjustable, the following irregular patterns are non-adjustable. There are 52 dynamic patterns, whose sizes are non-adjustable.

Function setting

Uses dipswitches to assign a unit's function: DMX/slave, or sound active, or AUTO mode. For the unit is DMX mode, set the DMX address using dipswitch. Each dipswitch represents a binary value. See the "Function chart".

O=OFF 1=ON X=OFF or ON

DIPSWITCH CHART										FUNCTION
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
X	X	X	X	X	X	X	X	0	1	SOUND ACTIVE
X	X	X	X	X	X	X	X	1	1	AUTO MODE
SET DMX ADDRESS FOR DMX MODE									0	DMX / SLAVE

Function Chart

Dipswitch #10 is use to set master or slave mode. Master modes have sound active and AUTO mode. Slave modes have DMX and Slave mode. The units automatically identify DMX or SLAVE mode by data receives. Dipswitch #9 use to is set sound active or AUTO mode in master mode.